CLAIM AMENDMENTS:

Pending Claims

Claim 1 (Currently Amended): A method for scheduling an emergency procedure, comprising the steps of:

acquiring an electrocardiogram record for a particular patient, said electrocardiogram record comprising simultaneously acquired 12-lead electrocardiograms;

sending said electrocardiogram record to a computer;

said computer determining that said particular patient has a high probability of acute coronary syndrome based at least partly on an automated analysis of data in said electrocardiogram record;

said computer automatically routing a communication to an electronic device accessible to a cardiologist on call in response to said determination by said computer that said particular patient has a high probability of acute coronary syndrome, said communication comprising said electrocardiogram record and results of said automated analysis;

said computer receiving a message from said cardiologist after said routing of said communication to said electronic device; and

in response to said ~~a predetermined~~ message from the cardiologist having content indicating that said patient should undergo an emergency procedure for treatment of acute coronary syndrome, said computer automatically scheduling said emergency procedure at an emergency coronary treatment facility.

Claim 2 (Original): The method as recited in claim 1, wherein said emergency coronary treatment facility is a catheterization lab.

Claim 3 (Original): The method as recited in claim 1, wherein said emergency procedure is percutaneous transluminal coronary angioplasty.

Claim 4 (Original): The method as recited in claim 1, wherein said automatic routing step is performed via a wireless communication channel.

Claim 5 (Original): The method as recited in claim 1, wherein said automatic scheduling step is performed via a network.

Claim 6 (Original): The method as recited in claim 1, wherein said automatic scheduling step comprises the steps of accessing a respective schedule for each of a plurality of emergency coronary treatment facilities and selecting an emergency coronary treatment facility having an optimum time-to-treatment.

Claim 7 (Original): The method as recited in claim 1, wherein said automatic scheduling step comprises the steps of accessing a respective schedule for each of a plurality of emergency coronary treatment facilities and selecting an emergency coronary treatment facility which has performed a number of said emergency procedures greater than a predetermined threshold number.

Claim 8 (Original): The method as recited in claim 1, wherein said automated analysis comprises performing a serial comparison of current and previous electrocardiogram records of said particular patient to determine whether a new left bundle branch block is present.

Claim 9 (Original): The method as recited in claim 1, wherein said automated analysis comprises the steps of:

generating diagnostic statements as a function of data in an electrocardiogram record of said particular patient;

and

determining whether the number of generated diagnostic statements belonging to a predetermined diagnostic classification equals at least a predetermined threshold number.

Claim 10 (Original): The method as recited in claim 9, wherein said diagnostic classification identifies diagnostic statements associated with acute coronary syndrome.

Claim 11 (Original): The method as recited in claim 1, wherein said automatic scheduling step comprises the step of automatically notifying staff members on call at said emergency coronary treatment facility regarding the scheduled procedure.

Claims 12-15 (Canceled).

Claim 16 (Currently Amended): A system for scheduling an emergency procedure, comprising:

an instrument for acquiring an electrocardiogram record for a particular patient, said electrocardiogram record comprising simultaneously acquired 12-lead electrocardiograms;

an electronic device accessible to a cardiologist on call;

a computer located at a site different than the sites where said instrument and said electronic device are located;

means for sending said electrocardiogram record from said instrument to a computer via a network; and

an emergency coronary treatment facility,

wherein said computer is programmed to perform the following steps:

determining that said particular patient has a high probability of acute coronary syndrome based at least partly on an analysis of data in said electrocardiogram record;

routing a communication to said electronic device in response to said determination by said computer that said particular patient has a high probability of acute coronary syndrome, said communication comprising said electrocardiogram record and results of said automated analysis;

receiving a message from said cardiologist after said routing of said communication to said electronic device; and

scheduling an emergency procedure at said emergency coronary treatment facility in response to said ~~a predetermined~~ message from the cardiologist having content indicating that said patient should undergo an emergency procedure for treatment of acute coronary syndrome.

Claim 17 (Original): The system as recited in claim 16, wherein said emergency coronary treatment facility is a catheterization lab.

Claim 18 (Original): The system as recited in claim 16, wherein said emergency procedure is percutaneous transluminal coronary angioplasty.

Claim 19 (Original): The system as recited in claim 16, wherein said computer is further programmed to notify staff members on call at said emergency coronary treatment facility regarding the scheduled procedure.

Claim 20 (Original): The system as recited in claim 16, further comprising an electronic bidirectional wireless communication device accessible to the cardiologist.

Claim 21 (Original): The system as recited in claim 16, wherein said instrument, said computer and said emergency

coronary treatment facility communicate via a network.

Claim 22 (Original): The system as recited in claim 16, wherein said computer is further programmed to access a respective schedule for each of a plurality of emergency coronary treatment facilities and select an emergency coronary treatment facility having a schedule which provides an optimum time-to-treatment.

Claim 23 (Original): The system as recited in claim 16, further comprising a storage medium for storing records of emergency procedures performed by emergency coronary treatment facilities, wherein said computer is further programmed to access said records of emergency procedures and to reject an emergency coronary treatment facility which has not performed a number of said emergency procedures greater than a predetermined threshold number.

Claim 24 (Original): The system as recited in claim 16, wherein said computer is further programmed to set thresholds for use in said automated analysis in accordance with configuration instructions input via a graphical user interface.

Claim 25 (Original): The system as recited in claim 16, wherein said computer is programmed to perform a serial comparison of current and previous electrocardiogram records of said particular patient to determine whether a new left bundle branch block is present.

Claim 26 (Original): The system as recited in claim 16, wherein said computer is programmed to perform the steps of:

generating diagnostic statements as a function of data in an electrocardiogram record of said particular patient; and

determining whether the number of generated diagnostic statements belonging to a predetermined diagnostic classification equals at least a predetermined threshold number.

Claim 27 (Original): The system as recited in claim 26, wherein said diagnostic classification identifies diagnostic statements associated with acute coronary syndrome.